## **Module 8 Sweetpotato Root Market Prices**

#### 1. Justification

In many Sub-Saharan African (SSA) countries, one of the important challenges is linking smallholders to markets with appropriate price information of crops and to improving their bargaining power with traders (Adam *et al.*, 2012; Courtois and Subervie, 2014). In this light, Lightfoot *et al.* (2008) identified that smallholders faces two major challenges in marketing of agricultural produce. First, smallholders lack access to relevant information and knowledge of markets in SSA. Second, smallholders require better access to other key players in the market chain, including processors, traders and consumers. The authors further argued that without sufficient market information, smallholders receive low prices and thus increase inefficiencies along the market chain. Adam *et al.* (2012) also found that transaction costs between farmgate and markets are extremely high, due to poor road infrastructure and the non-competitiveness of both the marketing and transportation sectors. Therefore, efficient market information can have positive benefits for farmers, traders and policy makers (Shepherd, 1997; Courtois and Subservice, 2014).

Recently, Hildebrandt *et al.* (2015) found that, in Ghana, market price information received by smallholders for their agricultural product in advance have strong implications for improving their bargaining power with traders and also increases their crop income. Prices are determined by the demand and supply of commodities over time, which fluctuates on the basis of nature of produce perishability and seasonality. Thus, farmers who produce high perishable crops, like sweetpotato, are considered to be highly vulnerable to price volatility. Therefore, it is necessary to have sweetpotato market information for farmers, particularly for smallholders to improve their bargaining power, make better decisions concerning whether or not to invest in root storage with the goal of increasing their incomes from sweetpotato root sales.

### 2. Objectives

We recommend collecting price information about sweetpotato and its major substitute at wholesale and retail markets. The specific objective of this effort is to provide timely market information for sweetpotato (SP) growers and to understand seasonal price fluctuations to better plan sweetpotato marketing strategies.

The price information will be collected on the following commodities: White-fleshed SP, Yellow-fleshed SP, Orange-fleshed SP, Mixed SP (more than one flesh type). This is because we would like to see if a premium price emerges for orange-fleshed SP compared to white-fleshed sweetpotato over time.

In addition, the major substitute for the sweetpotato in that market will be collected (for example, cassava or yam). We recommended collecting this information weekly in at least 2

important sweetpotato markets. Digital scales should be used to weigh the roots sold at the retail level. In addition, a table of relevant conversion rates for bags and baskets in common use should be developed for each country.

## 3. Tools

The ODK questions designed to collect price data from representative market at weekly basis is presented in the following section.

Name of Market			
ocation: Country	District	Village	
Name of price data collect	or:		
Geo-reference market			
Date of data collection: [	oay Month	Year	
Day of the Market: 1- N Sunday	onday 2-Tuesday 3-۱عام	Wednesday 4-Thursday 5-Friday 6- Satu	rday 7-
Currency:	_ Conversion Rate:	Local currency for \$1 USD	
If no, skip to question	sale and retail 2. Yes, number 2	SOLD IN THE MARKET?  , wholesale only 3. Yes, retail only  E/UNIT) OF ORANGE-FLESHED SWEETP	
1b. UNIT OF QUANTIT 1. Kg 2. Basket 3. Basii specify		g/Sack 6. Extended Bag/Sack 7. Heap 8.	Other,
1c. ESTIMATE WEIGHT	IN KILOGRAMS OF U	NIT	
1d. WHAT PRICE DID T	HE WHOLESELLER PA	Y FOR THIS UNIT?	
1e. WHAT IS THE RETA	AIL (PRICE/UNIT) OF (	ORANGE-FLESHED SWEETPOTATO (PRICE,	/UNIT):
1f. UNIT OF QUANTITY  1. Kg 2. Basket 3. Basin specify		g/Sack 6. Extended Bag/Sack 7. Heap 8.	Other,
1ø FSTIMATF WFIGHT	IN KILOGRAMS OF R	FTAII LINIT	

1h. NUMBER OF ROOTS PER RETAIL UNIT	
1i. NUMBER OF PEOPLE SELLING OFSP IN THE MARKET (WHOLESALERS + RETAILERS)	
2. <b>IS WHITE-FLESHED SWEETPOTATO BEING SOLD IN THE MARKET?</b> 0. No 1. Yes, both wholesale and retail 2. Yes, wholesale only 3. Yes, retail only <i>If no, skip to question number 3</i>	
2a. WHAT IS THE WHOLE SELLER (PRICE/UNIT) OF WHITE-FLESHED WEETPOTATO	
2b. UNIT OF QUANTITY SOLD 1. Kg 2. Basket 3. Basin 4. Can/Bucket 5. Bag/Sack 6. Extended Bag/Sack 7. Heap 8. Other, specify	
2c. ESTIMATED WEIGHT IN KILOGRAMS OF UNIT	
2d. WHAT PRICE DID THE WHOLESELLER PAY FOR THIS UNIT?	
2e. WHAT IS THE RETAIL (PRICE /UNIT) OF WHITE-FLESHED SWEETPOTATO	
2f. UNIT QUANTITY SOLD 1. Kg 2. Basket 3. Basin 4. Can/Bucket 5. Bag/6. Extended Bag/Sack 7. Heap 8. Other, specify	Sack
2g. NUMBER OF ROOTS PER RETAIL UNIT	
2h. ESTIMATED WEIGHT IN KILOGRAMS OF UNIT	
2i. NUMBER OF PEOPLE SELLING WFSP IN THE MARKET (WHOLESALERS + RETAILERS)	
<ul> <li>3. IS YELOW-FLESHED SWEETPOTATO BEING SOLD IN THE MARKET?</li> <li>0. No 1. Yes, both wholesale and retail 2. Yes, wholesale only 3. Yes, retail only If no, skip to question number 4</li> <li>3a. WHAT IS THE WHOLE SELLER (PRICE/UNIT) OF YELOW-FLESHED SWEETPOTATO</li> </ul>	
3b. UNIT OF QUANTITY SOLD 1. Kg 2. Basket 3. Basin 4. Can/Bucket 5. Bag/Sack 6. Extended Bag/Sack 7. Heap 8. Other, specify	
3c ESTIMATED WEIGHT IN KILOGRAMS OF LINIT	

3d. WHAT PRICE DID THE WHOLESELLER PAY FOR THIS UNIT?
3e. WHAT IS THE RETAIL (PRICE /UNIT) OF YELOW-FLESHED SWEETPOTATO
3f. UNIT QUANTITY SOLD 1. Kg 2. Basket 3. Basin 4. Can/Bucket 5. Bag/Sack 6. Extended Bag/Sack 7. Heap 8. Other, specify
3g. NUMBER OF ROOTS PER RETAIL UNIT
3h. ESTIMATED WEIGHT IN KILOGRAMS OF UNIT
3i. NUMBER OF PEOPLE SELLING YFSP IN THE MARKET (WHOLESALERS + RETAILERS)
S MIXED FLESH SWEETPOTATO BEING SOLD IN THE MARKET?  No 1. Yes, both wholesale and retail 2. Yes, wholesale only 3. Yes, retail only  If no, skip to question number 5
4a. WHAT IS THE WHOLE SELLER (PRICE/UNIT) OF MIXED-FLESHED WEETPOTATO
4b. UNIT OF QUANTITY SOLD 1. Kg 2. Basket 3. Basin 4. Can/Bucket 5. Bag/Sack 6. Extended Bag/Sack 7. Heap 8. Other, specify
4c. ESTIMATED WEIGHT IN KILOGRAMS OF UNIT
4d. WHAT PRICE DID THE WHOLESELLER PAY FOR THIS UNIT?
4e. WHAT IS THE RETAIL (PRICE /UNIT) OF MIXED-FLESHED SWEETPOTATO
4f. UNIT QUANTITY SOLD 1. Kg 2. Basket 3. Basin 4. Can/Bucket 5. Bag/Sack 6. Extended Bag/Sack 7. Heap 8. Other, specify
4g. NUMBER OF ROOTS PER RETAIL UNIT
4h. ESTIMATED WEIGHT IN KILOGRAMS OF UNIT
4i. NUMBER OF PEOPLE SELLING MIXED IN THE MARKET (WHOLESALERS + RETAILERS)

# 5 WHAT IS THE CROP THAT SUBSTITUTES FOR SWEETPOTATO, THAT IS EITHER WHEN SWEETPOTATO IS TOO EXPENSIVE OR THE OTHER CROP IS PREFERRED AT CERTAIN TIMES OF YEAR?

<ol> <li>Dried Cassava 2. Fresh Cassava 3. Yam 4. Cooking Banana (Plantain) 5. Irish Potato</li> <li>Maize 7. Taro 8. Other, specify</li> </ol>
5a. WHAT IS THE WHOLE SELLER (PRICE/UNIT) OF SUBSITUTE CROP FOR SWEETPOTATO
5b. UNIT OF QUANTITY SOLD 1. Kg 2. Basket 3. Basin 4. Can/Bucket 5. Bag/Sack 6. Extended Bag/Sack 7. Heap 8. Other, specify
5c. ESTIMATED WEIGHT IN KILOGRAMS OF UNIT
5d. WHAT PRICE DID THE WHOLESELLER PAY FOR THIS UNIT OF SUBSITUTE CROP?
5e. WHAT IS THE RETAIL (PRICE /UNIT) OF SUBSITUTE CROP
5f. UNIT QUANTITY SOLD 1. Kg 2. Basket 3. Basin 4. Can/Bucket 5. Bag/Sack 6. Extended Bag/Sack 7. Heap 8. Other, specify
5g. NUMBER OF ROOTS PER RETAIL UNIT
5h. ESTIMATED WEIGHT IN KILOGRAMS OF UNIT
5i. NUMBER OF PEOPLE SELLING SUBSITUTE CROP IN THE MARKET (WHOLESALERS + RETAILERS)

### 4. Analysis

The weekly price can be converted into average monthly price and then presented for various commodities (i.e., White-fleshed SP, Yellow-fleshed SP, and Orange-fleshed SP, Mixed SP (more than one flesh type and major substitutes) in a trend graph. In order to understand price movement between wholesale and retail market, the average monthly price information can also be classified into wholesale and retail market level and presented in a trend graph for various type of sweetpotato commodities. Along with graph, the price information can be presented in a table format as mentioned below.

Table 1: Monthly average selling price of various type of sweetpotato commodities at wholesale and market level

Month	Wholesale Market				Retail Market					
Name	White-	Yellow-	Orange-			White-	Yellow-	Orange-		Major
	fleshed	fleshed	fleshed	Mixed	Major	fleshed	fleshed	fleshed	Mixed	Substitute
	SP	SP	SP	SP	Substitute	SP	SP	SP	SP	

#### 5. References

- Adam, C.S., D.Kwimbere, W. Mbowe and S.O'Connell (2012) "Food Prices and Inflation in Tanzania" IGC Working Paper 12/0459, Tanzania
- Courtois, P and Suberivie, J. 2014. Farmer bargaining power and market information services, American Journal of Agricultural Economics, doi: 10.1093/ajae/aau051First published online: June 22, 2014.
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